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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,799	04/30/2001	Hugh E. McLoone	03797.00046	1068

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EXAMINER

CHAU, MINH H

ART UNIT PAPER NUMBER

2854

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/843,799

Applicant(s)

MCLOONE ET AL.

Examiner

Minh H Chau

Art Unit

2854

MLW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) 1-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 35-41, 43-45 and 47-49 is/are rejected.
- 7) ☒ Claim(s) 42 and 46 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 35, 40, 41 and 43** are rejected under 35 U.S.C. 102(b) as being anticipated by Chen (US # 6,011,495).

**With respect to claims 35 and 43**, Chen teaches a keyboard (1) comprising a plurality of keys (see Fig. 1), each of the plurality of keys functioning as predetermined command keys in a first mode and standard function keys in a second mode, the plurality of keys being primarily labeled as their respective command keys and being secondarily labeled as standard function keys, a Num lock key or a Scroll lock key or a function lock selector key (see Fig. 1), the Num lock key or the Scroll lock key or a function lock selector key being actuable to change the functionality of the plurality of keys between the first and second modes and maintain the selected mode until a subsequent actuation of Num lock key or Scroll lock key or a function lock selector key is performed (see Fig. 1 and col. 2 of Chen).

**With respect to claim 40**, see Fig. 1 of Chen that shows three keys of the plurality of keys each has an upper surface and a front side surface and the upper surface of each of key is labeled with its respective predetermined command as operated in the first mode.

**With respect to claim 41**, see Fig. 1 of Chen that shows the front side surface of each of the key is labeled with its standard function key label as operated in the second mode.

3. **Claims 35-37, 40 and 43** are rejected under 35 U.S.C. 102(e) as being anticipated by Mikan (US # 6,469,694).

**With respect to claims 35 and 43**, Mikan teaches a keyboard comprising a plurality of keys (134-139), each of the plurality of keys functioning as predetermined command keys in a first mode and standard function keys in a second mode, the plurality of keys being primarily labeled as their respective command keys and being secondarily labeled as standard function keys, a 2nd key or a function lock selector key (130), the 2nd key or a function lock selector key being actuable to change the functionality of the plurality of keys between the first and second modes and maintain the selected mode until a subsequent actuation of 2nd key or a function lock selector key is performed (see Fig. 1 and col. 4 of Mikan).

**With respect to claim 36**, see Fig. 1 of Mikan that shows the keyboard further having an alphanumeric section and the plurality of keys (134-139) are located behind the alphanumeric section.

**With respect to claim 37**, see Fig. 1 of Mikan that shows the keys of the plurality of keys are arranged in a row and the row being spaced from the alphanumeric section.

**With respect to claim 40**, see Fig. 1 of Mikan that shows three keys of the plurality of keys each has an upper surface and a front side surface (inherence) and the upper surface of each of key is labeled with its respective predetermined command as operated in the first mode.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claim 41** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mikan as applied to claims 35-37, 40 and 43 above, and in view of Chen (US # 6, 011,495).

**With respect to claim 41**, Mikan teaches all the limitation, except for the "front side surface of each key is labeled with its standard function key label as operated in second mode".

Chen teaches a standard keyboard comprising a plurality of multiple function keys, the front side surface of each key is labeled with a standard function key label as operated in the second mode (see Fig. 1 and cols. 1-2 of Chen).

In view of this teaching, it would have been obvious to one of ordinary skill in the art to modify device of Mikan to include the key that having a front side surface being labeled with a standard function key label for operate in second mode as taught by Chen for the advantage of allowing the primarily command function is more noticeable than the secondary standard function.

**6. Claims 41, 44 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mikan as applied to claims 35-37, 40 and 43 above.

**With respect to claim 41**, Mikan teaches all the limitation, except for the "front side surface of each key is labeled with its standard function key label as operated in second mode". Mikan teaches each of the key having upper surface and front side surface (inherence) and being labeled on it upper surface with a predetermined command function for operate in a first mode and a standard function for operate in another mode or second mode, the predetermine command function is being highlighted with a darker contrast (see Fig. 1) to indicated that the predetermined command function is more noticeably or more prominently than the standard function.

In view of this teaching, it would have been an obvious mater of design choice to modify device of Mikan to include the key that having a front side surface being labeled with a standard function key label for operate in second mode, since the main purpose of the Applicant's invention is to show the primarily predetermined command function labeled on the upper surface of the key is more prominent than the secondary standard function labeled on the front side surface of the key and it appears that the teaching of

Chen invention would perform equally well with the modification of the key that having a front side surface being labeled with a standard function key label for operate in second mode.

**With respect to claims 44 and 45**, Mikan teach all the limitation as explained above, except for the function lock indicator includes a LED member that indicates whether the keys are operating in the first or in the second mode. Mikan teaches the operation of turn on and turn off the LED (260) to indicate the selection of key status change from one mode to another mode (see col. 6 of Mikan).

In view of this teaching, it would have been obvious to one of ordinary skill in the art to modify the keyboard of Mikan to include a function lock indicator with a LED member as taught by Mikan so that the user be able to recognize the operation modes of the function keys.

7. **Claims 38-39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mikan as applied to claim 35 above, and in view of Liuzzo et al. (US # 4,698,618)

**With respect to claim 38**, Mikan teaches all the limitation as explained above except for the row includes first, second and a third key clusters each consisting of exactly three keys.

Liuzzo et al. teaches a keyboard comprising a row of keys includes first, second and third key clusters each consisting of exactly three keys (see the Figure and col. 7, lines 45-61 of Liuzzo et al.)

In view of this teaching, it would have been obvious to one of ordinary skill in the art to modify the device of Mikan to include the row of keys includes first, second and

third key clusters each consisting of exactly three keys as taught by Liuzzo et al. for the advantage of allowing the user to easy operates a specific functions of each of these key cluster.

**With respect to claim 39**, the combined product of Mikan and Liuzzo et al. teach all the limitation as explained above, except for the limitation of "fourth key cluster consists of exactly three keys". The combined product of Mikan and Liuzzo et al. teach the keyboard include a first, second and third key clusters each consisting of exactly three keys as explained above, it is noted that a broad recitation of a plurality of a known feature is an obvious expedient.

**8. Claims 47-49** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mikan (US # 6,469,694) in view of MCSWEENEY et al. (WO 97/27529)

**With respect to claims 47 and 48**, Mikan teaches a keyboard comprising a plurality of keys (134-139), each of the plurality of keys functioning as predetermined command keys in a first mode and standard function keys in a second mode, the plurality of keys being primarily labeled as their respective command keys and being secondarily labeled as standard function keys (see Figs. 1 and col. 4 of Mikan).

Mikan teaches all the limitation as explained above, except for the limitation "predetermined command key functions ... e-mail command" (lines 4-6 of claim 47).

MCSWEENEY et al. teach a keyboard comprising a plurality of keys (11 or 61) functioning as a predetermined command key, the predetermined command key functions including at least one of a document completion command (see Figs. 1, 5 and page 19, lines 22-34 of MCSWEENEY et al.)



In view of this teaching, it would have been obvious to one of ordinary skill in the art to modify the device of Mikan to include the predetermined command key functions including at least one of a document completion command for the advantage of allowing a user with a quick and direct access to a computer document operations.

**With respect to claim 49**, see Figs. 1 and col. 4 of Mikan that teach a 2nd key or a function lock selector key (130), the 2nd key or a function lock selector key being actuable to change the functionality of the plurality of keys between the first and second modes and maintain the selected mode until a subsequent actuation of 2nd key or a function lock selector key is performed.

***Allowable Subject Matter***

**9. Claims 42 and 46** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

**10.** Applicant's arguments with respect to claims 35-49 have been considered but are moot in view of the new ground(s) of rejection.

**11.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh H Chau whose telephone number is (703) 305-0298. The examiner can normally be reached on M - TH 9:30AM - 8:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H Hirshfeld can be reached on (703) 305-6619. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

MHC  
December 29, 2003

A handwritten signature in cursive script, appearing to read "MHC", with a horizontal line underneath the name.